

# GARzefe





The Official Newsletter of the Gwinnett Amateur Radio Society

January 2025 <a href="http://www.gars.org/">http://www.gars.org/</a> Volume 52, Issue 1

# Inside

President's Message	2
GARS Repeaters and Other Communications	3
About the GARzette	3
GARS Meetings & Workshops	4
GARS Happenings	5
Net Managers Corner	5
Education Committee's 2024 Recap	6
Upcoming GARS TechFest	7
Drake Amplifiers - Features - L-4 and L-4B - Part 2	8
GARS Membership	14
GARS Meeting Minutes	16
Events – GARS and others	17
Local Ham Radio Exams & Meetings	19
GARS Supporters	20



www.GARS.org

Don't forget to support our advertisers at the back of the *GARzette*.



The next TechFest is February 1, 2025



# **President's Message**

### From the President...



Happy New Year to everyone. It's a time for new beginnings and maybe a resolution or two. Do you have any radio resolutions you want to tackle in the new year? The cold weather makes me want to finish a few

projects before the warmer weather returns and portable operation becomes more comfortable. It is also a good opportunity to use any of that new radio equipment that some of you might have gotten over the holidays.

If you are looking for a new facet of the hobby to interest you, there is no better place to learn about it than the upcoming GARS TechFest. We will have many different aspects of the hobby on display and in forums to pique your interest. As always, there will be hot dogs and chili to keep you fed. Thanks especially to Ed Henderson (W4BSR) for chairing the TechFest committee

2025 GARS Club Officer Elections

We will be asking for nominations for officers at our general meeting in January. I'm looking forward to how they will continue to steer the club.

Hope to see many of you at the various events this with GARS.

73,

**Kevin** W4KIB
Club President



# **GARS Repeaters and Other Communications**

2 Meter Repeaters

147.075(+) MHz Tone 82.5 147.255(+) MHz Tone 107.2

1.25 Meter Repeater

224.580(-) MHz Tone 100.0, 1.6 MHz Offset

70 Cm Repeaters

444.525(+) MHz Tone 82.5 442.100(+) MHz Tone 100 442.325(+) MHz Tone 100 6 Meter Repeater

53.110 (-1 MHz) No Tone (Offline for Maintenance)

Other Resources:

**APRS** 

144.390 -- 1200 Baud W4GR

D-STAR (WD4STR)

145.060 + (1.4 MHz) 440.550 + (5 MHz) 6M Currently down

147.075

Operational in Snellville

147.255 Operational in Snellville224.580 Operational in Grayson

442.100 Operational at Goshen Springs Rd,

Norcross

442.325 Operational in Buford444.525 Operational in Snellville

Link remote receivers being added

#### **Notable Web Links**

Ham Radio Glossary: <a href="https://noji.com/hamradio/glossary.php">https://noji.com/hamradio/glossary.php</a> a very comprehensive listing provided by Noji Ratzlaff KNØJI. On his site there is also a lot of information about getting started in ham radio.

## Need Help - Let GARS Elmers answer your questions

Send an email to <a href="mailto:elmers@gars.org">elmers@gars.org</a> with the subject listing the area (like Antennas, Repeaters, Digital, DMR etc.) of your query to get to GARS Elmer volunteers.

#### **About the GARzette**

The *GARzette* is the official monthly newsletter of the Gwinnett Amateur Radio Society, serving its members and other persons interested in the advancement of the Amateur Radio art.

Original articles, art, and photos are invited and encouraged. Previously copyrighted submissions cannot be accepted for reprinting unless permission from the appropriate publisher is provided in writing along with the information being submitted. If reprints are from publications allowing their unrestricted use, please include a copy of the printed permission contained in the publication.

If possible, bring your articles to the monthly meeting in Microsoft Word or rich text (.rtf) or text or HTML format or by e-mail to <a href="mailto:editor@gars.org">editor@gars.org</a>. Artwork can be accepted in most any graphics format and can be submitted via e-mail to the same address. Alternate means of submittal can be arranged when necessary.

In keeping with the Amateur Radio spirit, permission is hereby granted for the reproduction of The *GARzette* articles by other Amateur Radio club newsletters provided that proper credit is given to the individual author and *The GARzette*.

The GARzette is published each month with the assistance of Karen KI4HPP and Kyle W4KDA who print copies for distribution at meetings, etc. and Dave Bruse, W4DTR, who distributes the newsletter electronically.

Deadline for submissions is the 28th of each month for inclusion in the following month's issue.

For additional information view our Website at: <a href="http://www.gars.org">http://www.gars.org</a> [PS— Articles to publish in the GARzette, either written by GARS members or published elsewhere, are always welcome. —Ed.]

Newsletter Email: editor@gars.org Editor: Bob Hoffmann, K4CQO

#### GARS Personalized Mugs for sale - Bits Print and Press



Jolie Dellaneve-Brown, KO4AHI







mailto:bitsprintandpress@gmail.com



# **GARS Meetings & Workshops**

GARS Meetings and Workshops are held in-person at the EAA 690 Hangar, 690 Airport Rd, Lawrenceville, GA 30046.

Meetings and Workshops are OPEN to all, feel free to share your invite with others.

**Zoom login** info will be posted to <a href="http://www.gars.org">http://www.gars.org</a> prior to the meeting.

# GARS Meetings Schedule (second Tuesday @ 7:00 PM): (these are the presentations)

- January 14 High Altitude Balloons Jack McElroy KM4ZIA, [note, the balloon is being launched at Techfest Jan. 11, 2025]
- February 11 TBD
- March 11 TBD

# Workshop Schedule (third Tuesday @ 7:00 PM): (these are the Hands-on Workshops)

- January 21 High Altitude Balloons Jack McElroy KM4ZIA
- February 18 TBD
- March 18 TBD

GARS celebrated its annual Holiday party in December instead of the monthly Meeting and Workshop and the GARS members enjoyed food, fun & games along with the awarding of the GARS Ham of the Year Award.



**Enjoy the New Year** 

We all thank Paul Kelley, W4KLY, GARS ham of the year for all of his accomplishments for the year.



Don't forget about our Discord utility for GARS announcements, news, activity spotting and more. See <a href="http://www.gars.org">http://www.gars.org</a> top of the home page. This is a sample of Discord. →





# **GARS Happenings**

### 20 Years ago in the January 2004 GARzette:

- It was noted GARS Special Service Club needs >51% of members are ARRL
- An interesting ARES article talking about Maidenhead Grid Squares
- An interesting article of how hams help out during the 2005 India Tsunami
- The 2005 GARzette was issued after the 2005 TechFest and discussed what happened

You can always browse the GARzette archive at <a href="http://www.gars.org/newsletters">http://www.gars.org/newsletters</a>. 73, Bob, K4CQO, GARzette Editor



## Health and Wellbeing - Sandy Jackson, KJ4DRO

Look for this resource on <u>Email</u> (<u>https://gars.org/contact/</u>) and use it as a means to convey information about a GARS family member or Silent Key notification.

# **Net Managers Corner**

# Monday Night 2 Meter "Want, Swap, Sell, and Information Net"

# GARS NEEDS MEMBERS TO SERVE AS NET CONTROL STATIONS!

GARS is a great Amateur Radio service club with the membership and awards to prove it. Our club is very busy and active, and we use the Monday night net to get timely information out to our members. Weekly participation is needed to make our net function well. There is only a small group of very dedicated people who make the net happen each week, and we need more members to volunteer to serve as Net Control Stations (NCS) on a rotating basis.

Out of almost 300 members, there are only five operators who serve as the NCS for the GARS net every Monday night. In no particular order, they are:

Ray - N4GYN David - KA4KKF Kevin - W4KIB Bill - WD4AMC Chuck - KK4TKJ

As GARS Net Manager (Chuck KK4TKJ), I would like to have more volunteers to fill NCS positions. I do plan and post the schedule months in advance. Any conditions will be accommodated that you as a rotating NCS need to place on the scheduling of your duties. If your plans change, I can make adjustments for the schedule to work, and I will make those changes happen as soon as I am notified of a problem. As Net Manager, I also send out reminders each week to let the NCS scheduled know he or she is NCS for the next Monday night net. In short, serving as a rotating NCS is a small duty but a great contribution to the club. The "Want, Swap, Sell Information Net" begins promptly at 19:30 every Monday night and runs about 30 minutes. As a scheduled NCS, you will request the assistance of a volunteer alternate NCS each time you have Net Control. Your simple duties will be to tune in to the GARS repeater, read the script, take a few notes and forward the information to me for record keeping.

Please lend a hand and contact (Chuck) via Email (<u>Click Here to Email our Net Manager</u>) to help support the effort that makes GARS the great club that it is. See you on the Nets!

# Fridays on 440 Net

The "Fridays on 440 Net" has been held every 2<sup>nd</sup> and 4<sup>th</sup> Friday of the month. During its time, it has provided the gars 440 repeater traffic and also made sure the members who joined the net were aware of how easy it was to connect to and also the excellent audio quality of this repeater.

GARS wishes to thank Alex for organizing and running this net and with this, the net has been discontinued.

Contact Alex Kowalchuk, AK4AM or use our Net contact facility (Click Here to Email our Net Manager).



# **Education Committee's 2024 Recap**

Saying the Education Committee had a busy year would be an understatement. We conducted three HamCrams (two Technician, one General). Over the course of the year we trained 47 students, many of which became new GARS members. Many thanks to my training partner John Davis. It's hard to believe we've been doing this for 13 years. We also must include the VE's for their support of this activity. We couldn't have done it without them.



In February we had a successful ARISS contact (Amateur Radio and the International Space Station) at Lilburn Elementary School. Within a very small time window the students were able to ask questions of Astronaut Jasmin Moghbeli. The photo shows future astronauts arriving in the gym ahead of the contact. After the contact, the school held an all-day STEM Day. Paul Kelley presented the history of Morse Code to the students while Tom Crowley explained the in's and out's of Radio Astronomy. Also helping out that day were Earl Whatley and Kevin Igarahsi-Ball. This event couldn't have happened without Daryl Young K4RGK and the North Fulton Radio Real League (NFARL), thank-you again. As many of you have heard me say before, an ARISS contact is at the top of the pyramid when ot comes to trying to get students interested in STEM activities.

On a sadder note, and after a 10 year run, we decided to discontinue the McConnell Middle School Amateur Radio Club (KD4TGR). Jean Delashmit and James Reeves, both science teachers at the school, started the club with GARS support. Over the years there were many accomplishments, most notably the many students that got their Technician licenses. A few went on the achieve General and Extra Class. In 2020 when our planned direct ARISS contact was cancelled due to COVID,we were able to pull off an indirect contact with the school's help. Over the summer Jean and I removed all the eaquipment from the radio room and prepared for a move to Lilburn Elementary. With the help of the county school system's facilities crew, we removed the antennas from McConnell and move them to Lilburn. Lilburn Elementary is starting a radio club on a smaller scale, but has some very enthusiastic student willing to learn about radio.

Tom Crowley's had another great year at Paul Duke STEM School, in Norcross. Tom has been helping students with their studies of the uinverse using radio astromomy. Tom has also been acting as a front man in getting the school to consider setting up a radio club.

#### Plans for 2025

In addition to our normal HamCram schedule, John and I will be teaching the Technician course to some students at Paul Duke STEM School in late Febrauary, early Match. I believe this is the first step in getting a radio club started at the school.

The week of February 17<sup>th</sup>, we have another opportunity to talk to an astronaut on the International Space Station. We have an incredibly excited group of teachers at Woodward Mill Elementary who are helping with the planning for this ARISS contact. Live stream information will be sent to club members as we get closer to the actual date.

We are always looking for additional members to join the committee. Consider joining our crew.

Ralph Pickwick KJ4CNC Education Chairman



# **Upcoming GARS TechFest**

TechFest rescheduled due to winter weather GARS TechFest - Saturday February 1 2025
Gwinnett Co Fairgrounds - Davis Rd Entrance



There is one place on January 11<sup>th</sup>, where all of the technologies available to Hams will be displayed, discussed, taught, and demonstrated. The **Gwinnett Amateur Radio Society's TechFest** is an exposition of technology. If you are anywhere in the area around North Georgia, make your way to the Gwinnett Fairgrounds for this annual event. There is no fee to enter, no fee to park, other events like VE Testing, electronic projects for youth, and a chili cook-off; and they'll even feed you lunch for free!

The first event of the morning will be a forum at 9:00 AM on **HAB's or High-Altitude Balloons**, by a young man who is a High School Junior, a ham radio enthusiast, and who comes from a family of Hams – Jack McElroy KM4ZIA. Weather permitting, there will also be a balloon launch carrying WSPR and APRS tor tracking as the balloon travels.

- Free Parking
- Free Admission
- Free Forums
- Free Ticket for Hourly Door Prizes
- Chili Cook-off
- Free Hotdog/Chili dog lunch with all the fixings
- Free Coffee/Water/Sodas
- Tour of the GA AUXCOMM Trailer
- Tour of the Gwinnett ARES Trailer

TECHFEST RAFFLE PRIZES 2025				
2 (3) 5 (3) 5 (4) 5 (5)	Yaesu FT-710 Field	HF/50MHZ, 100w SDR		
	Kenwood TM-D710GA Dual Band	Dual Band, Dual VFO V+V, V+U, or U+U Built-in GPS and TNC for APRS		
	ICOM IC-2100H	2-Meter Mobile		

TechFest also has door prizes given out during the day with handy equipment for additions to your ham radio collection.



# Drake Amplifiers - Features - L-4 and L-4B - Part 2

# **Vintage Amateur Radio**

de Bill Shadid, W9MXQ



Previously, I penned an article on the Drake L-4 and L-4B Linear Amplifiers. That was followed by what became a much more detailed article about the Drake L7 and L75 Amplifiers. Because of that, I have decided to write an additional article providing more detailed information concerning Drake's original L-4 and its successor, the upgraded and expanded L-4B. While I have an L7 Linear Amplifier that I purchased brand new in the early 1980's that has served me very well, I have aways felt that the L-4B was the superior amplifier. It built on the well thought out original L-4 and added conveniences that were also included in the L7 and L75 amplifiers of later years, The most notable shortcoming in the L-4 and L-4B is the lack of coverage of the 160-meter band. That feature alone made the L7 and L75 popular. My own late model L-4B came a few years ago from a ham in Illinois. It is a great performer.Coverage of the WARC Bands (30, 17, and 12 meters)

was openly possible in the L7 and L75 products but was just as possible in the L-4 and L-4B<sup>1</sup>.

To refresh your memory, here are the L-4 and L-4B (and Power Supply) pictures:



Drake L-4 Linear Amplifier
WB4HFN



Drake L-4B Linear Amplifier

weaker





L4-PS HV Power Supply Views (Front and Back)

W9MXQ

The L-4 and L-4B, distinguish themselves with their robust cooling system as compared to the L7 and L75. While Drake, in the L7 and L75, used a large fan blowing horizontally across a raised pair of 3-500z finals (one 3-500z in the L75), the L-4 and L-4B used a pressurized lower chassis with pressure created by a squirrel cage fan drawing air from the back of the amplifier, into the lower chassis, and out



via chimney ducting around the tubes. Review this Drake L-4B interior view to see the fan installation in a top view:



Drake L-4B Linear Amplifier (Representative of the L-4 also) Interior View – Front Panel at the Top of the Picture

**WB4HFN** 

At the center is the Plate Tune Capacitor with the Tank Coils to the left. The two 3-500z finals are at the right rear – showing the glass chimneys enclosing them. The blower motor assembly is at the bottom of the picture – blue in color. Lower left shows the filament transformer, partially shown. The Plate Choke, with its red windings, is shown just to the left of the final tubes. At the top right you can see the shield enclosures for the front panel meters.

Because of some control location differences in the L-4 and L-4B Linear Amplifiers, the back panel of the two radios was somewhat different.

The L-4 rear panel included items missing from the L-4B. For one, there is no Relative Power Level adjustment on the L-4B as it has true reading watt meters (300 and 3,000-watt scales) rather than a relative power readout. The L-4 rear panel also has an ALC Level adjustment that was moved to the front panel on the L-4B. Check the two rear panel views for details.





Drake L-4 Linear Amplifier – Rear Panel View

WB4HFN



**Drake L-4B Linear Amplifier – Rear Panel View** 

**WB4HFN** 

A review of the two rear panels shows the Squirrel Cage Blower input in the center of both panels – the blower is the same in both models. The L-4 Amplifier (top of the two views) shows the Relative Output Adjust control just to the left of the blower intake. The ALC Threshold Adjustment is at the lower right on the L-4 rear panel – to the left of the AGC input connector. That connector is a phono jack connector for the ALC connection from the driving transmitter/transceiver.



The unique connector PTT connection (engaging the amplifier) is on the L-4 to the right of the Power/Control connector and second from the lower left on the L-4B.

The two SO-239 connectors in the bottom center of both amplifiers are the RF Output (left) and the RF Input (right). That layout is common to both amplifiers.

Both amplifiers have the exceptionally large Cinch, eight-pin plus key stud, Power and Control lead connector. This connects to the separate L4-PS Power Supply unit using the fixed cable from the power supply chassis. That single cable splits close to the amplifier chassis end and includes the heavily insulated high voltage lead that terminates in a Millen High Voltage Connector. The connector to receive that line is on both amplifiers to the right of the blower input.

Now take a look at a bottom-view of the interior of the L-4B Linear Amplifier (fairly representative of both the L-4 and L-4B models).



Drake L-4B Linear Amplifier – Bottom Interior View Front Panel to the Right

Internet Picture – No Identity Given

At the top of the picture, you can see the two sockets for the 3-500z final amplifier tubes<sup>2</sup>. Check out the silver-plated copper strap used to interconnect the filament leads in parallel between the tubes and the filament choke (reddish colored wound choke in about the middle of the picture). Note also that the top strap extends to the right into the compartment holding the tuning slugs for the input coils (ensuring a good match to the exciter looking for a 50 to 70-ohm load)<sup>3</sup>.

See the brass high-voltage interlock leaf arm (on a phenolic board) between the left side and the left tube socket. That shorts the high voltage to ground if the top cover is removed.

Below the reddish filament choke you can see the feed through capacitors bringing filament voltage to the tubes. These leads feed from the feed-through capacitors back to the transformer – passing the transmit/receive relay to the left as they travel to the transformer on the lower left-hand corner. To the right of the transformer, you can see the terminal strip used to setup the transformer primary between 120 VAC and 240 VAC. In the L-4, L-4B, and L7 Amplifiers, the 120 VAC and 240 VAC selection must be made in BOTH the amplifier and the power supply chassis. Being a single chassis, this separate



chassis arrangement is not required in the L75 Amplifier.

At just above left center you can see the output of the blower that is used to pressurize the under chassis of the amplifier. This air would exit around the tube sockets which are sub-mounted below the chassis, on spacers to allow are to escape around the base of the tube. In flow, the air would go past the seal at the base of the tube to keep it relatively cool. This seal, visible as a black circle at the middle of both tube sockets, is the final vacuum draw down point for the tube manufacturing process and is a weak spot for most vacuum tubes. The air then enters glass chimneys for each tube – visible in the top views of the chassis – channeling air along the hot glass envelope of the tube, keeping it properly cooled.

**WARNING:** Do not power up any high-power amplifier with the blower or fan inoperative. This may allow enough heat to develop in the tubes to cause them to fail – even if merely in standby condition. If you do not see or hear the blower or fan operating – or feel that it is operating but running slowly – turn off power immediately to correct the problem<sup>4</sup>.

On both the L-4 and L-4B one could find straight sided chimneys – similar to a Coleman™ gas lantern design or a design that had a top edge that helped direct cooling air to the plate caps of the tubes (Eimac's standard design). Arguments exist to which is best, but Drake did use cooling fins on their plate caps, so they likely felt that the more expensive Eimac chimneys were not necessary. I am not sure that this debate will be settled!!

Just below the center right area of the underside of the chassis, the load capacitor is shown. It is a four-section variable. Below that location – to the lower right – there is visible the individual components of the ALC Threshold circuitry. To the right of that there is just visible – mounted to the front panel – the switch assembly for Power and Mode switching. These switches – as supplied by Drake – are extremely rare. Treat them very carefully. They sometimes become available in different configurations and with some effort can be converted for use in these amplifiers.

Finally, I draw your attention to potentially troublesome part of the L-4 and L-4B Linear Amplifiers. If you look at the mechanical layout you will note that the band switching for the input and the plate circuitry are not in common (as they are on the L7 and L75 Linear Amplifiers. Looking at the Input Tuned Circuit slug tuned coils, you can see a switch shaft going to the right through the chassis wall but not through the front panel. This shaft terminates at a cog wheel with a plastic "key chain" winding around it. This plastic chain goes to a similar cog wheel on the plate bandswitch. The bandswitch on the front panel is in a different location.

**EXTRA NOTE:** I must say here that while the L-4 and L-4B are similar in layout, I do not actually have an L-4 top or under chassis picture for reference. I cannot be 100% sure of the exact layout. If you have such pictures, I would like to see them and include them in my library. Contact me at <a href="https://www.wsg.nc.google.com">wsg.wsg.nc.google.com</a> of you have them.

As a note from this owner of both the L-4B and L7 Linear Amplifiers. I am very watchful of the power cable coming from the L4-PS (or L7-PS) to the amplifier chassis. This appears to me to be a custom-made cable that Drake had made to include the lower-level power, filament primary, and control leads. Plus, included is a heavily insulated high voltage lead in the same cable jacket. In appearance, the high voltage lead appears as RG-8 coaxial cable with the outer jacket removed. So, you see a very thick, translucent insulation over a heavy gauge conductor. Likely it is more than just modified coaxial cable; but it is worthy of inspection any time you decide to move the amplifier and/or the power supply.

Be aware of the high voltage in these amplifiers. They can kill you – INSTANTLY and SILENTLY. Today's amateur operators are not well conditioned for high voltage in radios. However, at the same time, high voltage is always present in vintage radios. Be respectful of the potential death dealing voltages present – DO NOT by-pass the interlocks that prevent high voltage from flowing when the cabinets are open. Also be aware, that while the L-4 and L-4B RF Cabinets are fully interlocked for protection, no such protection exists with the L4-PS Power Supply. So, I include here two of my favorite reminders applying to any work with vintage radios using high voltage:







Melodramatic you say? I say, not nearly dramatic enough!! There is not a second chance at the 3,000 volts present in these amplifiers. You will be dead<sup>5</sup>.

In a future article I will cover the failures, foibles, preventative maintenance, and repairs of all these quality products.

Ron Baker, WB4HFN, has kindly allowed me to use pictures from his fine website (<a href="http://www.wb4hfn.com">http://www.wb4hfn.com</a>) as a source of pictures for my articles relating to the products of the R. L. Drake Company. As with any article, suppliers of pictures and concepts deserve credit for their invaluable work. While Ron has offered his picture resource for my use, his call letters will always grace his contributions to my articles. I am indebted to many as sources – always credited – for these articles.

I appreciate that you read my articles. Remember that I am open to questions and comments anytime at my email address, <u>W9MXQ@TWC.com</u>.

A special note of thanks to my proofreader, Bob Bailey, W9DYQ. Bob is a lot more than a proofreader as he nearly always adds commentary that makes it into the article.

#### **Credits and Comments:**

- <sup>1</sup> Coverage of the WARC Bands (30, 17, and 12 meters) may require some retuning of the input circuits as covered in the Drake Operating Manual for the L-4 and L-4B Amplifiers. While covered, power limitations on the 30-meter band make the amplifier's use impractical.
- <sup>2</sup> These tubes can vary in type and brand:
  - In the Drake L-4 Linear Amplifier, they can be:
    - Eimac 3-400z (most common)
    - o Amperex 8163
  - In the Drake L-4B Linear Amplifier, they can be:
    - o Eimac 3-500z (most common) or 3-400z
    - Amperex 8802/3-500z or 8163
- <sup>3</sup> This 50 to 70-ohm load makes the Drake L-4 and L-4B (as well as the L7 and L75) linear amplifiers ideally suited to modern solid-state transceivers and all earlier Drake transmitters and transceivers.
- <sup>4</sup> In any restoration of a long idle linear amplifier, make sure that the fan is working to full rotation before any attempt to apply power. I generally separate the wiring to the fan and run it alone to determine good operation as a first step in any restoration.
- <sup>5</sup> "How much current does it take to kill someone? "The answer is very little. A current of as little as 0.007 amps (7mA) across the heart for three seconds is enough to kill. 0.1 amps (100mA) passing through the body will almost certainly be fatal." "As a rough rule of thumb, more than fifty volts is sufficient to drive a potentially lethal current through the body." In the SSB Mode, the Drake L-4 or L-4B produces 3,000 volts 700mA. In the CW Mode these amplifiers produce 2,100 volts at over 500mA. <a href="https://www.metroid.net.au/engineering/knowledge center/fatal-electric-shock-what-voltage-causes-death/">https://www.metroid.net.au/engineering/knowledge center/fatal-electric-shock-what-voltage-causes-death/</a>
- <sup>6</sup> Product specifications for the Drake L-4 and L-4B models shown come from their respective Instruction Manuals all of which exist in my files. Most Drake manuals are available on-line for downloading. I download Drake manuals from Ron Baker, WB4HFN, at: http://www.wb4hfn.com/DRAKE/DrakeManuals.htm.
- © W9MXQ



# **GARS Membership**

# **New Members in December**

**New Members: 0** 

Total Members as of January 1, 2025 344

#### Join GARS members for our:

- weekly lunch bunch at 11:30 AM most Fridays
- weekly breakfast gathering at 8:00 AM most Saturdays



Friday weekly gatherings are held at the Chilli's at:

947 Lawrenceville Suwanee Rd Lawrenceville, GA 30043

Saturday weekly gatherings are held at the Cracker Barrel at:

75 Celebration Dr Suwanee, GA 30024

# **Birthdays in January**

Diane Andrus (KB4LWS) Scott Bosier (KN4BJJ) Donald Brant (N2VGU) Jolie Brown (KO4AHI) Terry Cantrell (W4WTC) Eliud Carmona Rick Cobb (N4XYY) Angela Cohron Hal Collier (W4IGE) Randy Collins (N4COR) Mike Cooper (KI4HQD) John Craig (KK4JXU) Mark Fenley (KM4DJO) Steve Jassen (KN4SVT) Chuck Johnston (KN4JCN) Ruth Jones (K4RHJ) Kevin McClure (KF4HFN) James Otev (KB4AHI) Antonio Perry (KN4AXM) Grant Porter (KG4SDR) Mark Prichard (KN2TOD) Darlene Rogers (N8ILW) Bill Tyson (KQ4UTL) Newt White (N4EWT) Drew WHITE (KQ4NUQ) Ruth Willet (KM4LAO) Christopher Young (KX4CR)

# **GARS MEMBERSHIP**

Your current GARS membership status is shown in the monthly newsletter e-mail towards the bottom of the message. To become a GARS member, or to renew your GARS membership, please visit our website – <a href="https://www.gars.org/gars/membership/">www.gars.org/gars/membership/</a>. To make changes to your GARS membership (moved, new e-mail address, new phone number, etc.), please contact the Membership Chair at <a href="mailto:Emailto:

Membership Chair: Karen Albritton, KI4HPP Committee Members: Dave Bruse, W4DTR

#### **ARRL MEMBERSHIP**

To update your ARRL membership information, please visit their website - <a href="http://www.arrl.org">http://www.arrl.org</a>.

#### **MAINTAIN YOUR LICENSE**

You can update your Amateur Radio license information with the FCC at their website for free - https://www.fcc.gov/wireless/universal-licensing-system.

License renewal is subject to the \$35 FCC fee.

January 2025 - The GARzette - Page 14



# **Donating to GARS**

Your GARS donation can be used for a certain purpose by donating to one of these funds:

- GARS SK Memorial Fund for Education (to remember and honor Silent Keys);
- GARS Scholarship Fund (Administered by the ARRL for awarding scholarships);
- GARS General Fund (any club purpose).

GARS has joined these rewards programs (a portion of every purchase you make through these merchants may be donated to GARS):

· Kroger Community Rewards program.

For more information on how to sign up for these rewards programs, or to donate to GARS, visit

http://gars.org/gars/donations-to-the-club

# **GARS** on Social Media



**Discord Request:** 

http://gars.org/discord

**⊠** Groups.io

**Groups.io:** http://gars.org/groups.io



Visit GARS on Facebook:

http://gars.org/facebook



Follow GARS on X:

https://x.com/GARS\_Hams



Join GARS on YouTube:

http://gars.org/youtube

#### **GARS Mail Address:**

GARS P.O. Box 492531 Lawrenceville, GA 30049

#### Officers



Alex Kowalchuk, Vice President AK4AN

Drew White, Secretary KQ4NUQ

Glen Wendt, Treasurer W3WWT

Kevin Scott, Program Manager K4GTR

### **Managers and Committee Chairs**

Karen Albritton, Membership Chair KI4HPP

Dave Bruse, VE Team Leader W4DTR

David Adcock, Webmaster KA4KKF

Ralph Pickwick, Education Chair KJ4CNC

Earl Whatley, Apparel Manager AF4FG

Bob Hoffmann, GARzette Editor K4CQO

Eddie Foust, Repeater Chair WD4JEM

Mike Weathers, WAS / DXCC QSL Card Checker and Historian ND4V

Chuck McCord, Net Manager KK4TKJ

Steve Back, Technical / RFI Advisor WB2OGY

Dallas Mellichamp, Workshop Leader N4DDM

Sandy Jackson, Health and Wellbeing KJ4DRO

Kevin Igarashi-Ball, Multimedia Chair W4KIB

Dallas Mellichamp, Georgia QSO Chair N4DDM

Neil Derryberry, Elmer Manager WD4NET

Edwin Henderson, TechFest Chair W4BSR

Open Winter Field Day Chair, Field Day Chair

#### **Directors and Trustees**

Joe Biddle, AD4PZ

Kyle Albritton, W4KDA

John Davis, WB4QDX Bill Cherepy, WB4WTN W4GR Trustee



# **GARS Meeting Minutes**

# GARS - Holiday Party 12/7/2024

We all thank Paul Kelley, W4KLY, GARS ham of the year for all of his accomplishments for the year.



GARS, in December each year, holds its holiday party and forgoes the normal meeting and workshop events.

The monthly meeting on the 2<sup>nd</sup> Tuesday and Workshop on the 3<sup>rd</sup> Tuesday return in January



# **Events – GARS and others**

# **ARRL CONTESTING INFO**

From ARRL Contest Calendar

> For more information click the links <

January 2025

1 Straight Key Night

4 Kids Day

4-5 RTTY Roundup

18-20 January VHF

February 2025

10-14 School Club Roundup

15-16 International DX – CW

March 2025

1-2 <u>International DX- Phone</u>

April 2025

13 Rookie Roundup - Phone

May 2025 (no ARRL Contests)

June 2025

7-8 International Digital Contest

14-16 <u>June VHF</u> 21 <u>Kids Day</u>

28-29 Field Day

**July 2025** 

12-13 IARU HF World Championship

August 2025

2-3 222 MHz and Up Distance Contest

16-18 10 GHz & Up - Round 1 16-17 EME - 2.3 GHz & Up

17 Rookie Roundup - RTTY

September 2025

13-15 <u>September VHF</u>

13-14 EME - 2.3 GHz & Up

20-22 10 GHz & Up - Round 2

October 2025

TBD Collegiate QSO Party

11-12 EME - 50 to 1296 MHz

20-24 School Club Roundup

November 2025

1-3 <u>Nov Sweepstakes–CW</u> 8-9 <u>EME - 50 to 1296 MHz</u>

15-17 Nov Sweepstakes-Phone

December 2025

5-7 <u>160 Meter</u> 13-14 <u>10 Meter</u>

21 Rookie Roundup-CW

For more information:

http://www.arrl.org/contest-calendar

#### **HAMFEST CALENDAR**

[Please confirm the status of a Hamfest before making plans to attend]

02/1/2025 - GARS TechFest

Location: Gwinnett County Fairgrounds, GA

Type: Technical Fest

**Sponsor:** Gwinnett Amateur Radio Society

Website: http://www.GARS.org

02/07/2025 - 02/09/2025

Orlando HamCation, Southeastern Division Convention

**Location:** Orlando, FL **Type:** ARRL Convention

**Sponsor:** Orlando Amateur Radio Club **Website:** <a href="http://www.hamcation.com">http://www.hamcation.com</a>

02/15/2025 - Highlands County Amateur Radio Club Hamfest

Location: Sebring, FL Type: ARRL Hamfest

Sponsor: Highlands County Amateur Radio Club

02/22/2025 - <u>Dalton Hamfest</u> Location: Dalton, GA Type: ARRL Hamfest

**Sponsor:** Dalton Amateur Radio Club **Website:** https://www.grz.com/db/W4DRC

02/28/2025 - 03/01/2025

BirmingHamfest, ARRL Alabama Section Convention

**Location:** Trussville, AL **Type:** ARRL Hamfest

Sponsor: Birmingham Amateur Radio Club

Website: http://birminghamfest.org

03/22/2025 - DeKalb County Amateur Radio Club Swap Meet

**Location:** Fort Payne , AL **Type:** ARRL Hamfest

**Sponsor:** DeKalb County Amateur Radio Club **Website:** http://w4dqh.org/meet

04/05/2025 - <u>Daleville Area Hamfest</u>

**Location:** Daleville, AL **Type:** ARRL Hamfest

Sponsor: Daleville Area Amateur Radio Service
Website: https://daleville.us/daleville-area-hamfest

04/12/2025 - TarcFest
Location: Tampa Fl

Location: Tampa, FL Type: ARRL Hamfest

Sponsor: Tampa Amateur Radio Coub

Website: http://www.hamclub.org

04/26/2025 - Wiregrass ARC - Spring Tailgate

**Location:** Headland, AL **Type:** ARRL Hamfest

Sponsor: Wiregrass Amateur Radio Club

Website: http://w4dhn.org

For more information: www.arrl.org/hamfests-and-conventions-calendar

When searching by division, remember some states adjacent to GA are in different divisions: Southeastern: GA, AL, FL Delta: TN Roanoke: NC, SC



GARS Events Calendar for 2025		GARS Recurring Calendar		
TechFest Winter Field Day Dog Show Fundraiser Spring Technician HamCram Georgia QSO Party North metro area Fox Hunt Memorial Day Parade ARC/KARC Hamfest Field Day Summer General HamCram Fall Technician HamCram JOTA Stone Mt. Hamfest Holiday Party	February 1 2025 January 25-26 2025 March 2025 March 2025 April 12-13 2025 April 2025 May 26 2025 June 7 2025 June 28-29 2025 July 2025 September 2025 October 2025 November 1-2 2025 December 2025	<ul> <li>2nd Tuesday of the month at 7 pm (except December) Monthly Club Meeting 690 Airport Rd, Lawrenceville, GA 30046</li> <li>3rd Tuesday of the month at 7 pm (except December) Monthly Workshop 690 Airport Rd, Lawrenceville, GA 30046</li> <li>3rd Sunday of the Month at 3 pm GARS Ham Exam Session 690 Airport Rd Lawrenceville, GA 30046</li> <li>Every Monday at 7:30 pm: GARS Want, Swap, Sell, and Information Net on the GARS 147.075 MHz repeater</li> <li>Every Monday at 8:30 pm: ARES Training on the GARS 147.075 MHz repeater</li> <li>Every Friday at 11:30 am, GARS Lunch at Chilli's</li> <li>Every Saturday at 8:00 am GARS Breakfast at Cracker Barrell</li> </ul>		

# GARS Calendar for January 2025

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
			1	2	3	4
					11:30 AM Lunch at Chillis	8:00 AM Breakfast at Cracker Barrel
5	7:30 – 8:00 PM 2M Net	7 7:00 PM Exec Meeting	8	9	11:30 AM Lunch at Chillis	8:00 AM Breakfast at Cracker Barrel TechFest Gwinnett Fairgrounds
12	13	14	15	16	17	18
	7:30 – 8:00 PM 2M Net	7:00 PM Meeting EAA 690 Hangar			11:30 AM Lunch at Chillis	8:00 AM Breakfast at Cracker Barrel
19	20	21	22	23	24	25
3:00 PM GARS Ham Radio Exams, EAA 690 Hangar	7:30 – 8:00 PM 2M Net	7:00 PM Workshop Meeting EAA 690 Hangar			11:30 AM Lunch at Chillis	8:00 AM Breakfast at Cracker Barrel
26	27	28	29	30	31	
	7:30 – 8:00 PM 2M Net				11:30 AM Lunch at Chillis	



# **Local Ham Radio Exams & Meetings**

#### **GARS Ham Radio Exams**

### GARS Exam Sessions are held the 3rd Sunday of the month

Preregistration is REQUIRED

Doors open at 2:45pm, exams start promptly by 3:00pm

For more information and to preregister, please visit <a href="https://gars.org/exams/">https://gars.org/exams/</a>

GARS VE-Team VEC: W5YI-VEC EAA 690 Hangar

690 Airport Rd

Lawrenceville, GA 30046

GARS VE Team Leaders E-mail: <a href="mailto:exams@gars.org">exams@gars.org</a>.



#### **December 2024 Results**

The GARS VE Team exam session results from December 15th.

- 1 New Technician:
- Daniel J DiLuzio KQ4ZUH

Special thanks to the Volunteer Examiners who made this exam session possible:

W4DTR - David Bruse

KJ4CNC - Ralph Pickwick

AB4QQ - Russell Prevost

KM4SWL - Richard Kitz

NG4H - William Beguhn

W4SHT - Lynn Hatker

WS3V - William Rudd

Thanks & 73, Bob Hoffmann K4CQO (Co-CVE)

#### **Local Ham Radio Exams**

In order to find an exam session near you, please visit <a href="http://www.arrl.org/exam\_sessions/">http://www.arrl.org/exam\_sessions/</a>. Contact the information in the listing for further information.



# **Local Ham Radio Meetings**

In order to find a local Ham Radio Club meeting near you, please visit <a href="http://www.arrl.org/find-a-club">http://www.arrl.org/find-a-club</a>. Contact the club for meeting information.





# **GARS Supporters**







In order to have your ad included, contact <a href="mailto:editor@gars.org">editor@gars.org</a>. Current ad prices per year are:

Business Card	\$50
1/4 page	\$125
1/2 page	\$150
Full page	\$200

For swap items, post and see items on GARS groups.io (<a href="https://groups.io/g/GARS">https://groups.io/g/GARS</a>).

# Ready to take your Ham Radio Exam?

Go to <a href="https://GARS.org/exams/">https://GARS.org/exams/</a> to learn more, and to register for an upcoming exam session.